

WE CLAIM

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- 5 1. A method of printing digital data on a photograph wherein the data is image data from a camera system which has been transformed by an image processing program including the steps of:
- a) receiving image data corresponding to an image;
  - b) loading an image processing program
  - c) transforming said image data with said image processing program to produce transformed image data;
  - 10 e) encoding said transformed image data and said image processing program into a fault tolerant digital form;
  - f) printing out said fault tolerant digital form of said transformed image data along with a fault tolerant encoded form of said image processing program using an ink jet printing process with an invisible ink on a surface of a print media while simultaneously printing out said transformed image data as a photographic image in a visual, human readable form on the same surface of said print media.
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- 20 2. A method as claimed in claim 1 wherein the invisible ink is an infra-red absorbing ink with little absorption in the visible spectrum.
3. A method as claimed in claim 1 wherein converting said data to said fault tolerant encoded form comprises forming a Reed-Solomon encoded version of said image.
- 25 4. A method as claimed in claim 1 wherein said fault tolerant encoded form of said data includes applying a high frequency modulation signal to said fault tolerant encoded form such that said permanent record includes repeatable high frequency spectral components.
- 30 5. A method as claimed in claim 4 wherein said high frequency modulation signal comprises a checkerboard two dimensional spatial signal.

6. A method as claimed in claim 1 wherein said step of printing out utilizes a print roll means storing said print media and an ink supply for printer means which is detachable from a camera device forming said photograph.

5 7. An apparatus for printing in invisible ink encoded fault tolerant digital data on a photograph said apparatus including:

- 10 a) a camera system for imaging an image including means for outputting said image in a digital format; said camera system further including means for inputting an image processing program;
- b) means for processing said digital format of said image into a transformed version of said image in accordance with program steps of said image processing program;
- c) means for converting said digital format of said image and said image processing program into a fault tolerant encoded digital form;
- 15 d) means for printing on a surface said transformed version of said image and said fault tolerant encoded digital form of said image and said image processing program using an ink jet printing process, said fault tolerant encoded digital form being printed using an infra-red ink.

20 8. An apparatus for printing in invisible ink encoded fault tolerant digital data on a photograph as claimed in claim 7 wherein the invisible ink is an infra-red absorbing ink with little absorption in the visible spectrum.

25 9. An apparatus for printing in invisible ink encoded fault tolerant digital data on a photograph as claimed in claim 7 wherein said means for printing includes a page width print head using an ink jet structure with a print roll feeding print media therethrough.